

WHAT IS CLAIMED IS:

Sub B1

1. A portable computing system with selectable transceiver switching comprising:
 - 3 a set of one or more transceivers, each of the transceivers with a unique communication protocol;
 - 5 a switch capable of differentiating communication signals and determining and choosing an appropriate transceiver from the set of transceivers to communicate for the computing system; and
 - 7 a multi-band antenna capable of receiving and transmitting varying frequency signals to the chosen transceiver.
- 1 2. The portable computing system of claim 1 wherein the switch is a zener diode that differentiates upon power transmission.
- 1 3. The portable computer system of claim 1 wherein the switch is an active power sensor device.
- 1 4. The portable computer system of claim 1 wherein the switch is a current limiter device.
- 1 5. The portable computer system of claim 1 further comprising:
 - 2 a lookup table that associates transmission power with each of the transceivers, whereby the switch selects a transceiver from the set of transceivers when a certain power state in the lookup table is detected.
- 1 6. The portable computer system of claim 5 wherein the switch selects a transceiver based on a transmitted power.
- 1 7. The portable computer system of claim 5 wherein the switch selects a transceiver based on a received power.

1 8. The portable computer system of claim 1 further comprising:
2 a software driver that interfaces to the transceiver and interfaces to an
3 operating system of the portable computer system, whereby the
4 software driver receives instructions as to which transceiver of the set
5 of transceivers to select.

1 9. The portable computer system of claim 8 wherein the software driver
2 receives instructions from a higher level protocol stack of the portable computer
3 system.

1 10. The portable computer system of claim 8 wherein the software driver
2 receives instructions from a set of software applications of the portable computer
3 system.

1 11. The portable computer system of claim 1 wherein the set of
2 transceivers and the switch are integrated into a circuit card.

1 12. The portable computer system of claim 7 wherein the circuit card
2 connects to a system board of the portable computer system.

1 13. The portable computer system of claim 7 wherein the circuit card is a
2 Mini PCI card.

1 14. A method of switching between a set of one or more transceivers
2 within a portable computing system comprising:
3 looking up in a state table corresponding power and frequency values;
4 comparing the power and frequency of a received signal to the corresponding
5 power and frequency value; and
6 selecting a transceiver board capable of processing the received signal.

1 15. A method of switching between a set of one or more transceivers
2 within a portable computing system comprising:
3 looking up in a state table corresponding power and frequency values;

4 comparing the power and frequency of a transmitted signal to the
5 corresponding power and frequency value; and
6 selecting a transceiver board capable of processing the received signal.

1 16. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 14 wherein:
3 selection of a transceiver is performed by a software driver.

1 17. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 16 wherein:
3 the software driver is instructed by a higher level protocol stack.

1 18. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 14 wherein:
3 the software driver is instructed by a set of software applications of the
4 portable computer system.

1 19. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 15 wherein:
3 selection of a transceiver is performed by a software driver.

1 20. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 19 wherein:
3 the software driver is instructed by a higher level protocol stack.

1 21. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 19 wherein:
3 the software driver is instructed by a set of software applications of the
4 portable computer system.